

Amendments to the Claims:

Claims 1 and 21 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A capacitive sensor for detecting a level of a viscous fluid in a container having an interior volume, the sensor comprising mutually cooperative, mutually electrically isolated first, upper and second, lower electrodes arranged for placement on a wall of the container in isolation from the interior volume of the container, wherein each of the first and second electrodes exhibits a two-dimensional area having a vertical dimension and a horizontal dimension, and wherein the first and second electrodes are arranged in mutual proximity such that at least a majority of each of their respective areas are both vertically and horizontally offset from each other and to an extent at least sufficient to enable rapid detection of a decreasing level of the viscous fluid in the container when the viscous fluid has reached a level proximate a lower edge of the first, upper electrode and a residual film of the viscous fluid remains on an inner surface of the wall of the container above the level of the viscous fluid and adjacent at least a portion of the first, upper electrode.

2. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are arranged such that their respective areas are substantially both vertically and horizontally offset from each other.

3. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are arranged such that their respective areas are completely both vertically and horizontally offset from each other.

4. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are both vertically and horizontally spaced from each other.
5. (Original) The sensor of claim 1, wherein the electrodes comprise substantially two-dimensional plates.
6. (Original) The sensor of claim 1, further comprising a conductor coupled to each of the first and second electrodes.
7. (Original) The sensor of claim 6, wherein the conductors coupled to each of the first and second electrodes are also coupled to control circuitry.
8. (Previously presented) The sensor of claim 7, wherein the conductors coupled to each of the first and second electrodes are coupled to the control circuitry through a Zero Insertion Force connector.
9. (Previously presented) The sensor of claim 1, further comprising control circuitry, wherein the control circuitry is coupled to one of the first and second electrodes and configured to supply an oscillating signal having a frequency greater than 1 MHz thereto, another of the first and second electrodes being coupled to a reference voltage.
10. (Previously presented) The sensor of claim 9, wherein the control circuitry is configured to supply a signal at a frequency of at least about 4 MHz.
11. (Previously presented) The sensor of claim 10, wherein the control circuitry is configured to supply a signal at a frequency of at least about 8 MHz.
12. (Previously presented) The sensor of claim 1, further comprising control circuitry coupled to one of the first and second electrodes and configured to detect a change in a capacitance of the sensor.

13. (Original) The sensor of claim 1, further comprising at least one alarm responsive to an output signal of the sensor.

14. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are horizontally spaced.

15. (Canceled)

16. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are arranged for placement on a wall of the container.

17. (Original) The sensor of claim 16, further comprising a mounting structure to which the first and second electrodes are affixed.

18. (Previously presented) The sensor of claim 17, wherein the mounting structure is a thin, electrically insulative film.

19. (Previously presented) The sensor of claim 18, wherein the thin, electrically insulative film is Mylar.

20. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are placed within the wall of the container.

21. (Currently Amended) A method for detecting a level of a viscous fluid within a container having an interior volume, comprising:
placing a capacitive structure including mutually cooperative, mutually electrically isolated, first, upper, and second, lower electrodes on a wall of the container in isolation from the interior volume of the container, wherein each electrode exhibits a two-dimensional area having a vertical dimension and a horizontal dimension and wherein the first and second electrodes are

arranged in mutually proximity such that at least a majority of each of their respective areas are both vertically and horizontally offset from each other;
driving the capacitive structure with an oscillating signal at a frequency of more than about 1 MHz and generating an output signal from the capacitive structure responsive thereto;
adjusting decreasing a fluid level within the container at a rate sufficient to leave a residual film of the viscous fluid on an interior surface of the wall above the level of the viscous fluid and at least proximate a lower edge of the first, upper electrode; and
rapidly detecting a change in the output signal responsive to the adjusting decreasing of the fluid level.

22. (Previously presented) The method of claim 21, wherein placing the capacitive structure on a wall of the container comprises placing the capacitive structure within the wall of the container.

23. (Previously presented) The method of claim 21, wherein driving the capacitive structure with an oscillating signal at a frequency of more than about 1 MHz further comprises driving the capacitive structure at a frequency of at least about 4 MHz.

24. (Previously presented) The method of claim 21, wherein driving the capacitive structure with an oscillating signal at a frequency of more than about 1 MHz further comprises driving the capacitive structure at a frequency of at least about 8 MHz.

25. (Original) The method of claim 21, wherein placing the capacitive structure on a wall of the container comprises forming the capacitive structure on a mounting structure and affixing the mounting structure to an exterior wall of the container with adhesive.

26. (Original) The method of claim 21, wherein placing the capacitive structure on a wall of the container comprises forming the capacitive structure on the wall.

27. (Original) The sensor of claim 21, further comprising determining whether the output signal exceeds a reference signal.

28. (Previously presented) The method of claim 27, further comprising initiating at least one alarm if the output signal exceeds the reference signal.

29. (Original) The method of claim 28, wherein the at least one alarm is at least one of an audible alarm and a visual alarm.